

PROSOCO R-Guard[®] Cat 5[®]/Cat 5 RainScreen Fluid-Applied Air & Water Barrier System



The purpose of this document is to establish uniform procedures for installing the PROSOCO R-Guard[®] Cat 5[®] fluid-applied air and water barrier system in the CavityComplete[®] Wall System.

The techniques involved may require modifications to adjust to jobsite conditions. PROSOCO recognizes that site specific conditions, weather patterns, contractor preferences and membrane detailing may require deviation or alteration from this prescribed installation procedure. When such

circumstances exist on a project, PROSOCO recommends that the local PROSOCO Regional Sales Manager or Building Envelope Group Specialist be contacted at 800-255-4255 for assistance and approval, as required.

This document provides the necessary instructions for the application of R-Guard Cat 5[®] /Cat 5[®] RainScreen and its related air barrier system components in order to qualify for the CavityComplete[®] Wall System Warranty.

System Components

Recommended materials and their use are as follows. For more information on the following materials, please contact 844-CAV-COMP or visit www.CavityComplete.com.

Detailing Products

- PROSOCO R-Guard[®] PorousPrep
- PROSOCO R-Guard[®] Joint & Seam Filler
- PROSOCO R-Guard[®] FastFlash[®]

Air & Water Barrier Membrane

- PROSOCO R-Guard[®] Cat 5[®]/Cat 5[®] RainScreen

Interior Air Sealant

- PROSOCO R-Guard[®] AirDam[®]

Limitations

- R-Guard[®] PorousPrep is for use on raw gypsum surfaces only.
- R-Guard[®] AirDam[®] is not for bridging gaps or sealant joints larger than 1 inch in width.
- R-Guard[®] is not for applications that may come in direct contact with strong acids or solvents.
- PROSOCO R-Guard[®] products are not for below-grade application or in locations designed to be continuously immersed in water.
- Cat 5[®]/Cat 5[®] RainScreen is not to be directly applied to fireproofing materials

Storage

Keep R-Guard[®] PorousPrep from freezing. Maintain temperature of 45–100°F (7–38°C).

When stored at or below 80°F (27°C), R-Guard[®] AirDam[®], FastFlash[®], Joint & Seam Filler, Cat 5[®]/Cat 5[®] RainScreen, and PorousPrep products have a shelf life of 12 months after the date of manufacture.

For all products, keep containers tightly closed when not dispensing. Do not open until preparation work has been completed. Published shelf life assumes upright storage of factory-sealed containers in a cool, dry place. Do not alter or mix with other chemicals. Do not double stack pallets. Keep out of the reach of children. Dispose of unused product and container in accordance with local, state and federal regulations.

Step 1: Surface Preparation

Apply to clean surfaces free of contaminants. Chemical residues, surface coatings or films may adversely affect adhesion. Pressure-treated wood and other contaminated surfaces should be cleaned with a IPA alcohol wipe and allowed to flash off before application of R-Guard products. Ambient air and surface temperatures and low humidity conditions affect the application and curing of the RGuard[®] Fluid-applied Air & Water Barrier System. Each one of these conditions have specific precautions that are recommended to be followed:

Hot Weather Condition /Precautions: When air or surface temperatures exceed 95° F (35° C), apply the membrane to the shady side of the structure before daytime air and surface temperatures reach their peak. Hot surfaces may be cooled with a mist of fresh water. Keep containers closed and out of direct sunlight when not in use. Do not apply when substrate temperature exceeds 110° F (43°C).

Cold Weather Conditions/ Precaution: Membrane application may be applied to frost-free substrates at temperatures below 32° F (0° C). Product will not begin to cure until temperatures reach 32° F (0° C) and remain above freezing. Keeping material stored in a heated environment prior to use will help in these conditions.

Low Humidity Condition/Precautions: The process of curing may take longer when lower humidity levels occur. A light misting of warm water over the treated surface will accelerate curing if necessary.

Roofing systems shall be capped and sealed or top of walls protected from water intrusion both before and after air barrier system installation. Water intrusion may interfere with bonding of air barrier waterproofing materials and/or detrimentally impact the performance of such materials.

Step 2: Detail Work Prior to Air Barrier Membrane Application

A: Cut edge of Gypsum Sheathing

1. Use R-Guard[®] PorousPrep to seal exposed gypsum board edges in rough opening. Apply to exposed raw gypsum board edges in a thin, uniform coat. Do not over apply. Allow to dry tack free before application of Joint & Seam Filler, FastFlash[®] and/or Cat 5[®]/Cat 5[®] RainScreen.

B: Filling Joints, Seams, Cracks and Detailing Over fasteners heads and Around Penetrations.

1. Apply a bead of Joint & Seam Filler to all sheathing joints, seams and cracks then strike smooth with a dry tool. Joint widths up to ¼ inch can be treated without the use of a backer rod. Treat joints ranging from 3/8 inch to 1 inch in width with backer rod before application of R-Guard[®] Joint & Seam Filler. Joints larger than 1 inch must be structurally improved or addressed with PROSOCO SureSpan EX transition extrusion. Detail over wood knots, deep cracks or surface irregularities with Joint & Seam Filler to complete the surface preparation.

2. Use a dry knife, trowel or spatula to spread Joint & Seam Filler 1 inch beyond the seam on each side to a thickness of 20-30-mils

3. Spot fastener heads with Joint & Seam Filler.

C: Detailing & Waterproofing Rough Openings (Windows and Door Penetrations)

1. For detailing the rough openings with Joint & Seam Filler as indicated, please follow above Step 2: A. & B.
2. Allow Joint & Seam Filler to skim over before installing R-Guard[®] FastFlash[®].
3. Apply FastFlash[®] over the exterior inside framing of the rough opening and onto the exterior vertical wall surface 4-6 inches to create a 12-15 mil thick monolithic, pinhole-free flashing surface.
4. Allow treated surfaces to skin over before installing window, doors and other wall assembly components.
5. Proceed to application of primary air & water barrier Cat 5[®]/ Cat 5[®] RainScreen.

Step 3: Air & Water Barrier Membrane Preparation and Application

1. Using a low-speed drill and jiffy mixer, blend the coating membrane well by mixing from top-to-bottom and side-to-side for a minimum of 3 minutes before use. Do not dilute or alter, or use for applications other than specified. Avoid entraining air into the product by spinning the mixer too fast.
2. Coverage rates will vary depending upon surface porosity, moisture uptake and other factors. Some CMU, gypsum and OSB sheathing board products may require more than two coats to achieve a pin hole-free membrane surface. For more information regarding coverage rates as it pertains to all surface condition, please consult with the AMT Laboratories Technical Bulletin available at www.prosoco.com/literature-library.
3. Roller apply R-Guard[®] Cat 5[°]/Cat 5[°] RainScreen to exterior wall assembly using vertical strokes with a slight diagonal slant. Ensure there are no pin holes, voids or gaps in the membrane.
4. Seal around masonry ties and penetrations with Cat 5[°]/Cat 5[°] RainScreen with a trimmed stiff-bristle chipper brush. Inspect entire applied surface after initial application and touch up as needed.

Performance characteristics of the Cat 5[°]/Cat 5[°] RainScreen along with all the detail fillers and liquid flashing membrane products, (FastFlash[®], Joint & Seam Filler) are formulated to self-seal when penetrated with a self-tapping fastener (i.e. Heckmann Pos-I-Tie Masonry Veneer Anchor) or screw. If installation of the wall component does not engage into the wall support framing structure adequately creating a hole in the membrane before the insulation layer is installed, make sure to seal over the hole with Joint & Seam Filler followed by

striking the sealant flush with a dry knife, spatula or tool. If the deficient condition occurs after the installation of insulation, make sure to fill the entire hole in the insulation with the Joint & Seam Filler to the point of contact of the sealant to the Cat 5[°]/Cat 5[°] RainScreen membrane.

Connect the air barrier system to the all adjacent building envelope assemblies i.e. below- grade waterproofing/under-slab vapor barrier, window and curtain wall and roofing systems and other building components providing an air/moisture-tight structure. Please reference 844-CAV-COMP or www.CavityComplete.com for specific materials and interface tie-in sequencing to the adjacent building envelope systems.

Protect the Cat 5[°]/Cat 5[°] RainScreen Fluid Applied Membrane System during installation of the CavityComplete Wall System avoiding damage by other trades not associated with the system. Other components of the CavityComplete Wall System, i.e. Owens Corning FOAMULAR[®] Extruded Polystyrene (XPS) Insulation, Mortar Net Solutions TotalFlash[®], Heckmann Veneer Tie Assembly and Rodenhouse Fastening Systems and /or PROSOCO[®] accessory materials may be installed after the Cat 5[°]/Cat 5[°] RainScreen has been applied to the selective substrate for approximately 12-24 hours or overnight.

Schedule covering of the completed air barrier assembly by sequencing the cladding installation as soon as possible to protect the membrane system from physical damage. If the wall assembly cannot be covered after for as up to 12-month period, please contact 844-CAV-COMP or www.CavityComplete.com

Step 4: Install the Interior Air seal

1. Using a professional grade caulking gun, install R-Guard[®] AirDam[®] sealant over a closed cell (ridged or soft) backer rod in a continuous monolithic bead without gaps or air pockets. The sealant is to be placed between the interior perimeter joint of the rough opening of the window or door. Window/door shims should be moved in such a manner as to not obstruct the continuous installation of the caulk bead.

2. Tool the AirDam[®] sealant immediately to ensure complete wetting of the joint bond surface producing a smooth, concave joint profile flush with the edges of adjacent surfaces. Do not use soapy water or solvent to help with the tooling process or to slick the surface profile of the sealant.

Step 5: Inspection, Repair and Cleanup

Visually inspect the completed installation for pin holes or voids. Repair any observed deficiency with FastFlash[®] or Joint & Seam Filler. Areas of membrane damage will need to be removed and selective recoating of the damaged surface with FastFlash[®], Joint & Seam Filler and/or Cat 5[°]/Cat 5[°] RainScreen membrane. Confirm all accessories

installed after the air barrier has been applied are properly counterflashed to provide positive drainage.

Clean and wipe tools/equipment and surrounding construction surfaces with IPA alcohol immediately to prevent permanent marking/staining.

